What is claimed is:

1. An organic electroluminescent device, comprising:

a transparent substrate;

an anode, disposed on the transparent substrate;

an organic electroluminescent layer, disposed on the anode; and

a cathode, disposed on the organic electroluminescent layer, wherein the organic electroluminescent layer comprises a compound represented by a following chemical structure (1):

(1)

$$R_1$$
 R_2 R_3 R_4 R_4

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wherein $R_1 \sim R_4$ are hydrogen, substituted or unsubstituted alkyl group, substituted or unsubstituted cycloalkyl group, substituted or unsubstituted alkyloxy group, substituted or unsubstituted alkenyl group, substituted or unsubstituted amino group, substituted or unsubstituted polycyclic aromatic group or a combination thereof; Z is a electron-donating group; A is substituted or unsubstituted cyclohexene or naphthalene group; and B and C are electron withdrawing groups.

2. The organic electroluminescent device of claim 1, wherein B and C can be same or different substitutes.

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- 3. The organic electroluminescent device of claim 1, wherein B and C are comprised of cyano, indandione, benzoimidazole, benzooxazole or benzothiazole substitutes.
- 4. The organic electroluminescent device of claim 1, wherein the organic electroluminescent layer further comprises an aromatic amino compound, an aromatic diamino compound or an aromatic triamine compound having poly-cyclic ring aromatic substitutes or aromatic hydroxyl substitutes.
- 5. The organic electroluminescent device of claim 1, wherein the organic electroluminescent layer further comprises a metal complex.
- 6. The organic electroluminescent device of claim 5, wherein the metal complex comprises AlQ3.
 - 7. The organic electroluminescent device of claim 1, wherein the organic electroluminescent layer has a thickness from about 1 nm to about 1 μ m.
 - 8. The organic electroluminescent device of claim 1, wherein the Z is -NR₅R₆.
 - 9. The organic electroluminescent device of claim 1, further comprising an electron transporting layer disposed between the cathode and the organic electroluminescent layer.
 - 10. The organic electroluminescent device of claim 9, further comprising an electron injection layer is disposed between the cathode and the electron transporting layer.
 - 11. The organic electroluminescent device of claim 1, further comprising a hole transporting layer disposed between the anode and the organic electroluminescent layer.
 - 12. The organic electroluminescent device of claim 11, further comprising a hole injection layer is disposed between the anode and the hole transporting layer.

13. An organic electroluminescent compound utilized for an organic electroluminescent device, the organic electroluminescent compound is represented by the following chemical structure (1):

5 (1)

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$$R_1$$
 R_2 R_3 R_4 R_4

wherein $R_1 \sim R_4$ are hydrogen, substituted or unsubstituted alkyl group, substituted or unsubstituted cycloalkyl group, substituted or unsubstituted alkyloxy group, substituted or unsubstituted alkenyl group, substituted or unsubstituted amino group, substituted or unsubstituted polycyclic aromatic group or a combination thereof; Z is a electron-donating group; A is substituted or unsubstituted cyclohexene or naphthalene group; and B and C are electron withdrawing groups.

- 14. The organic electroluminescent compound of claim 13, wherein B and C can be same or different substitutes.
- 15. The organic electroluminescent compound of claim 13, wherein B and C are comprised of cyano, indandione, benzoimidazole, benzooxazole or benzothiazole substitutes.
- 16. The organic electroluminescent compound of claim 13, wherein the organic electroluminescent compound further comprises an aromatic amino compound, an

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aromatic diamino compound or an aromatic triamine compound having poly-cyclic ring aromatic substitutes or aromatic hydroxyl substitutes.

- 17. The organic electroluminescent compound of claim 13, wherein the organic electroluminescent compound further comprises a metal complex.
- 18. The organic electroluminescent compound of claim 17, wherein the metal complex comprises AlQ3.
- 19. The organic electroluminescent compound of claim 13, wherein the Z is NR5R6.